

Species Vulnerability Indices

Alternatives to "DIY"

Species are Important!



Vulnerability Indices can...

- ... save R & D time
- ... remind you about vulnerability factors
- ... compare apples and oranges
- ... promote transparency

Vulnerability Indices cannot...

- ... turn garbage into gold
- ... replace in-depth VAs of species

System for Assessing `Vulnerability of
Species (SAVS) to Climate Change
(Forest Service)



Framework for categorizing the
relative vulnerability of threatened &
endangered species to climate
change
(EPA)



Climate Change Vulnerability Index
(NatureServe)



All:

- are potentially rapid
- score individual factors
- produce categories of relative vulnerability
- address uncertainty

SAVS



www.fs.fed.us/rm/grassland-shrubland-desert/products/species-vulnerability

Terrestrial vertebrates

Habitat, physiology, phenology, biotic interactions

Abundance, range, demographics considered implicitly

Scale: habitat/management area

EPA



<http://cfpub.epa.gov/ncea/cfm/recorddisplay.cfm?deid=203743>

T&E Vertebrates Only

Baseline & climate change vulnerability

Abundance, range, demographics considered in baseline

Spatial Scale: any

NatureServe



www.natureserve.org/climatechange

Terrestrial/aquatic, plants/animals

Excludes conservation status factors – use in conjunction with G/S-ranks

Exposure and sensitivity sections

Scale: state or large conservation area



Duplicate Conservation Status Assessments?

	Extremely Vulnerable	Highly Vulnerable	Moderately Vulnerable	Presumed Stable	Increase Likely
G1					
G2					
G3					
G4					
G5					



209 spp



	Extremely Vulnerable	Highly Vulnerable	Moderately Vulnerable	Presumed Stable	Increase Likely
G1	10	11	25	9	0
G2	2	4	5	3	1
G3	0	4	3	11	1
G4	1	1	6	24	3
G5	0	2	7	61	15

$p < 0.001$


